

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/776,550	02/02/2001	Jared Zerbe	1726.7220800	9988	
38013	7590 11/20/2003		EXAMINER		
HUNTON & WILLIAMS LLP/RAMBUS INC.			LAU, TUNG S		
INTELLECTU 1900 K STRE	JAL PROPERTY DEPART ET, N.W.	ART UNIT	PAPER NUMBER		
SUITE 1200			2863		
WASHINGTO	DN, DC 20006-1109	DATE MAILED: 11/20/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

j.		Application	on No.	Applicant(s)				
		09/776,55	50	ZERBE ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Tung S La	u	2863	AW			
Period f	Th MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence addi	ress			
THE - Extra afte - If th - If N - Fail - Any	HORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION ensions of time may be available under the provisions of 37 CFR of SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a re O period for reply is specified above, the maximum statutory perioure to reply within the set or extended period for reply will, by statute to reply received by the Office later than three months after the mail and patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no eve eply within the statu od will apply and wi ute, cause the appl	ent, however, may a reply be timutory minimum of thirty (30) days Il expire SIX (6) MONTHS from ication to become ABANDONEI	nely filed s will be considered timely. the mailing date of this com O (35 U.S.C. § 133).	nmunication.			
1)🖂	Responsive to communication(s) filed on 31	October 2003	<u>3</u> .					
2a)⊠	☐ This action is FINAL. 2b)☐ This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposi	tion of Claims							
5)□ 6)⊠ 7)⊠ 8)□	· /	rawn from cor ed. o.						
Applicat	tion Papers							
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) according a context and a context a	ccepted or b)[ne drawing(s) b ection is require	e held in abeyance. See ed if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR				
Priority	under 35 U.S.C. §§ 119 and 120							
13) \(\begin{array}{c} \text{*} & \text{*}	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document and Copies of the certified copies of the priority document application from the International Bure See the attached detailed Office action for a list Acknowledgment is made of a claim for domestince a specific reference was included in the foreign Inguage part of the priority document is made of a claim for domestince as the company of the foreign language part of the foreign language pa	ents have been ents have been fority docume eau (PCT Rule st of the certif stic priority ur first sentence provisional ap stic priority ur	n received. n received in Application received in Application that have been received a 17.2(a)). fied copies not received ander 35 U.S.C. § 119(e) of the specification or plication has been received at 35 U.S.C. §§ 120	on No ed in this National Solution d. e) (to a provisional a in an Application Dolution eived. and/or 121 since a	application) ata Sheet. specific			
Attachmei	nt(s)							
2) 🔲 Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s))	4) Interview Summary 5) Notice of Informal Pa 6) Other:					

Art Unit: 2863

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1, 9, 2, 3, 6, 7, 8, 10, 12, 14, 15, 16, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Gruetzner et al. (U.S. Patent 5,444,715).

Regarding claim 1:

Gruetzner discloses a digital signaling system comprising: a transmit circuit, the transmit circuit comprising a transmit data input and a transmit data output, the transmit circuit producing an transmit data output signal at the transmit data output based on a transmit data input signal from the transmit data input when the transmit circuit is operating in a normal mode (Col. 4, Lines 43-53), the transmit circuit further comprising a transmit repeating pattern generator producing a repeating pattern signal, the transmit circuit producing the transmit data output signal at the transmit data output based on the repeating pattern signal when the transmit circuit is operating in a test mode (Col. 2-3, Lines 49-37); and a receive circuit, the receive circuit operably coupled to the transmit circuit and receiving the transmit data output signal from the transmit circuit at a receive data input, the receive circuit comprising a receive data output, the receive data output

Page 3

Art Unit: 2863

based on transmit data output signal when the receive circuit is operating in the normal mode (Col. 4, Lines 43-53), the receive circuit further comprising a receive repeating pattern generator producing the repeating pattern signal, the receive circuit producing a comparison signal based on comparison dependent on the transmit data output signal and the repeating pattern signal when the receive circuit is operating in the test mode (Col. 2-3, Lines 49-37).

Regarding claim 9:

Gruetzner discloses a method for evaluating a digital signaling system comprising the steps of: generating a transmit repeating pattern in a transmit circuit; transmitting the transmit repeating pattern to a receive circuit (Col. 1, Lines 35-57, Col. 2-3, Lines 49-38); generating a receive repeating pattern in the receive circuit; and comparing the transmit repeating pattern to the receive repeating pattern to obtain a comparison (Col. 1, Lines 35-57, Col. 2-3, Lines 49-38).

Regarding claims 2, 3, 6, 7, 8, 10, 12, 14, 15, 16, 17, 18:

Gruetzner discloses the use of a shift register (Col. 2-3, Lines 49-37); the digital signaling system wherein a transmit shift register output of the transmit shift register is coupled a transmit shift register input of the transmit shift register when the transmit circuit is operating in the test mode and a receive shift register output of the receive shift register is coupled to a receive shift register input of the receive shift register when the receive circuit is operating in the test mode (Col.

3-4, Lines 49-37); two bits of information over a single conductor (fig. 1, unit 124, fig. 2), voltage reference to a ground (fig. 2), differential signal over two conductors (fig. 1, unit 120, 121), based on comparison (Col. 1, Lines 35-57); adjust the characteristic of the circuit (Col. 1, Lines 35-57).

Claim Objections

2. Claims 4, 5, 11, 13, 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach the use linear feedback logic gate in the system, determining the boundary value of the receiving characteristic which reliable operation of the system is provided.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments filed 10/31/2003 have been fully considered but they are not persuasive.

Art Unit: 2863

A. Applicant argues that the prior art does not show the 'transmit circuit'.

Gruetzner discloses a 'transmit circuit' in Col. 4, Lines 25-53, fig. 1, unit 111, subsection 127.

- **B**. Applicant also argue that the prior art does not show the 'transmit circuit producing a repeating pattern signal in a test mode'. Gruetzner discloses a 'transmit circuit producing a repeating pattern signal in a test mode' in Col. 3, Lines 22-38, Col. 4, Lines 25-53, fig. 2.
- **C**. Applicant continues to argue that the prior art does not show the 'receive circuit producing a repeating pattern signal in a test mode'. Gruetzner discloses a 'receive circuit producing a repeating pattern signal in a test mode' in Col. 3, Lines 22-38, Col. 4, Lines 25-53, fig. 2.
- **D**. Applicant continues to argue that the prior art does not show the 'transmit circuit using shift register'. Gruetzner discloses a 'transmit circuit using shift register' in Col. 2-3, Lines 49-37.
- E. Applicant continues to argue that the prior art does not show the 'transmit circuit shift register couple to a receive circuit using shift register'. Gruetzner discloses a 'transmit circuit using shift register' in Col. 2-3, Lines 49-37, fig. 1, unit 110, 111.
- **F**. Applicant continues to argue that the prior art does not show the 'adjusting receive circuit'. Gruetzner discloses a 'adjusting receive circuit' in Col. 2-3, Lines 20--37, abstract, fig. 1, unit 110, 111.

Art Unit: 2863

Reminds to the applicant that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

Art Unit: 2863

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309.

The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-308-5841 for

regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 RightFAX Telephone Numbers: TC2800 Official Before-Final RightFAX - (703)

872-9318, TC2800 Official After-Final RightFAX - (703) 872-9319

TC2800 Customer Service RightFAX - (703) 872-9317

Supervisory Patent Framines
Technology Center 2800

Page 7